

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0040

WASTE DISCHARGE REQUIREMENTS

FOR
YOUNG LIFE
YOUNG LIFE WOODLEAF WASTEWATER SYSTEM
YUBA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

1. On 27 February 2002, Young Life (Discharger) submitted a Report of Waste Discharge (RWD) for improvements to its domestic wastewater treatment and disposal system for the Young Leaf Woodleaf camp in Yuba County. The initial RWD did not contain sufficient information to prepare revised Waste Discharge Requirements (WDRs). However, the Discharger has subsequently submitted the necessary information.
2. WDRs Order No. 5-00-063, adopted by the Regional Board on 17 March 2000, prescribes requirements for a discharge from a sequencing batch reactor treatment plant to subsurface leachlines. However, that Order does not reflect existing site conditions. In addition, significant facility expansion and wastewater system modifications have been proposed. Therefore, WDR Order No. 5-00-063 is no longer adequate for regulating discharges from the facility, and must be updated.
3. The Discharger owns and operates the Young Life Woodleaf camp, which is in Section 9, T19N, R7E, MDB&M at 11359 La Porte Road (Assessor's Parcel Number 50-050-015), approximately four miles north of Challenge in Yuba County. The facility location is shown on Attachment A, which is attached hereto and made part of this Order by reference.
4. The Young Life Woodleaf camp is approximately 209 acres in size, and contains cabins, a cafeteria, a laundry facility, a swimming pool, and a maintenance shop, as shown on Attachment B, which is attached hereto and made part of this Order by reference.
5. The camp is generally operated from March through November. The peak season is from May through September, with a reported population of approximately 400 people per day and a wastewater flow of approximately 19,000 gallons per day (gpd). The camp population during the months of October, November, March and April is reportedly approximately 260 people per day with a wastewater flow of approximately 12,000 gpd. During the months of December, January, and February, the camp is closed, with only a skeleton crew of less than ten, and minimal wastewater flow.
6. The Discharger plans to expand operations to include a gymnasium and two dormitory-type cabins, capable of housing approximately 60 people each. The expanded facility will serve approximately 600 people per day and will have a maximum wastewater flow of 31,000 gpd.

Existing and Modified Wastewater Treatment System

7. Both the existing and modified wastewater systems will treat and dispose of the domestic wastewater produced at the camp.
8. The existing wastewater system consists of a sewer collection system, a grease separator, trash tanks/debris racks, sequencing batch reactor (SBR), a 15,000-gallon holding tank, a suspended chlorine tablet feeder for wastewater disinfection, and a leachfield containing approximately 1,000 linear feet of leachlines, with a reported safe loading capacity of approximately 12,000 gpd.
9. The SBR uses an activated sludge process in which aeration, sedimentation, and decant functions are combined into a single reactor. The reactor treats an approximately 10,000-gallon dose of wastewater and decants it to the holding tank until it is pumped to the disposal area. The existing SBR has a design capacity of 40,000 gpd.
10. The modified wastewater treatment system will consist of the existing grease separator, trash tanks/debris racks, SBR, and holding tank, along with a new float-controlled duplex pumping system, an in-line media filtration system, and a chlorine metering and baffle system.
11. For the purposes of this Order, the term “wastewater facility” shall mean the existing sewer collection system, grease separator, trash tanks/debris racks, SBR, and holding tank, and the proposed system modifications, including the pumping system, in-line filtration system, chlorine metering and baffle system, effluent conveyance lines (commencing at the chlorine baffle system outlet), new leachfield, and spray disposal area.
12. Wastewater generated in the cafeteria will flow through the sewer collection system to the grease separator prior to entering trash tanks/debris racks. Wastewater from the rest of the facility will flow through the sewer collection system directly into the trash tanks/debris racks prior to entering the SBR. Effluent from the SBR will be pumped in 10,000-gallon doses to the 15,000-gallon holding tank.
13. The new duplex pumping system will pump the SBR-treated wastewater through the in-line media filtration system and then through the chlorination system.
14. The RWD states that when completed, the improved treatment system will have the capability of producing wastewater effluent with a maximum biochemical oxygen demand (BOD) of 20 mg/l, suspended solids concentration of 20 mg/l, total nitrogen of 30 mg/l, and total coliform count of 23 MPN/100 ml.

Wastewater Disposal System

15. The modifications to the wastewater disposal system will include installation of a new leachfield and spray disposal area. The new leachfield will be utilized throughout the entire year, while the spray disposal area will only be used from March through November. The old leachfield will no longer be utilized.

16. Treated effluent will flow under pressure to the the new leachfield and/or the spray disposal area. The effluent discharge will be split between the two areas, with flow controlled by manual valves. The flow to each area will be metered. This Order requires daily monitoring of flows.
17. Wastewater disposal in the new leachfield will be accomplished via shallow leach lines, using a pressure dose process. Disposal will primarily be accomplished through evapotranspiration and percolation. The new leachfield has already been installed, but cannot be utilized until this Order is adopted.
18. The new leachfield is north of La Porte Road near the northeast corner of the property, as shown on Attachment B. The design of the leachfield is based on a 47 minutes per inch percolation rate and a maximum flow of 13,000 gallons per day. The leachlines are constructed in 2-foot wide by 1.5-foot deep trenches with a one foot soil cover. Only the trench bottom area, not the sidewall area, has been utilized in designing trench lengths. The total length of the leachlines is approximately 4,000 feet. The leachfield system consists of eight separate zones, each containing 500 linear feet of line. A 100% replacement area will be reserved adjacent to the new leachfield. An additional replacement area will be reserved on the west side of the camp, near the dry pond.
19. A curtain drain has been installed immediately above the new leachfield in order to divert runoff and subsurface drainage around the area. The curtain drain is considered a part of the leachfield system and needs to be maintained in order to ensure the long term performance of the leachfield.
20. Monitoring of the wastewater depth in the leachline trenches can aid in early detection of leachfield failure. Leachline observation risers have been installed in the top and bottom trench of each zone. The Discharger must conduct regular monitoring of the observation risers.
21. The soil media in the new leachfield is inconsistent, containing a significant amount of rock. In many places, the leachline trenches have been excavated in fractured bedrock. Because fractured bedrock does not provide as much biological treatment and filtration as uniform soil, additional precautions must be taken to protect groundwater.
22. The proposed spray disposal area is immediately north and east of the new leachfield along the northern edge of the property, as shown on Attachment B.
23. The spray disposal area is three acres in size and contains pine and fir trees, brush, and native grasses. Topographic slope varies from 10% to 20%. The Discharger has proposed a design flow of 18,000 gpd based on a soil permeability of approximately 1.2 inches per hour and a nitrogen loading rate of 30 mg/l.
24. The spray disposal area will be used in conjunction with the new leachfield, except during the months of December, January, and February, and at other times of the year when precipitation events or high winds limit the use of spray disposal.
25. In order to prevent wastewater runoff from leaving the spray disposal area, the Discharger has proposed to modify an abandoned flume that exists along the lower edge of the spray disposal

area. The flume will be modified to collect and contain any wastewater runoff. The flume is considered a part of the spray disposal area and must be maintained in order to ensure compliance with this Order.

Sanitary Sewer System

26. The sewer collection system collects untreated wastewater from all structures generating wastewater (office, cabins, cafeteria, laundry facility) and delivers it to the treatment facility. A “sanitary sewer overflow” is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the wastewater treatment plant (in this case, the chlorine baffle system outlet). Temporary storage and conveyance facilities (such as tanks, basins, tightlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered sanitary sewer overflows, provided that the waste is fully contained within these temporary storage/conveyance facilities.
27. Within this system, a sanitary sewer overflow consists of domestic sewage or partially treated wastewater. The chief causes of sanitary sewer overflows include grease blockages, debris blockages, sewer line flood damage, valve failures, vandalism, pump failures, power outages, lack of capacity, and contractor caused overflows.
28. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic wastes, nutrients, oxygen demanding organic compounds, oil and grease, and other wastes. Sanitary sewer overflows can cause temporary exceedences of applicable water quality objectives, pose a threat to public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters in the area.

Site-Specific Conditions

29. The site is within the Plumas National Forest at an elevation of approximately 3,200 feet.
30. Average annual rainfall in the area is approximately 65 inches (Challenge Ranger Station, California Cooperative Snow Surveys, Department of Water Resources). Approximately eight feet of snowfall occurs per year, typically spread out over several events.
31. The topography of the site is characterized by slightly undulating hills with slopes ranging from 0 to 20 percent and a small valley which extends from the northwestern to the southeastern corners of the site. An intermittent stream flows from the northwest into the northern portion of the property, and drains into a pond, situated approximately 400 feet west of the new infiltration area.
32. On-site soils are relatively shallow, ranging from 12 inches to 96 inches in depth, and are underlain by weathered and fractured bedrock.
33. The site is in the Bullards Bar Hydrologic Subarea (No. 517.51), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

34. There are three water supply wells on site. The depths of the wells range from 200 to over 300 feet below ground surface.
35. All portions of the WWTF are outside the 100-year flood zone.
36. In October 1998, a number of observation pits were excavated and percolation rate testing was conducted to investigate site soil characteristics and determine whether the proposed infiltration area was suitable for a leachfield disposal system. All pits were excavated to a depth of at least seven feet. Groundwater was not observed in any of the observation pits. Results of percolation testing indicate that the average percolation rate was approximately 23 minutes per inch at 20 inches and approximately 43 minutes per inch at 30 inches in the vicinity of the new infiltration area.
37. Four shallow monitoring wells have been installed in the vicinity of the leachfield. The Discharger has not provided as-built construction details of the wells. According to the typical construction design presented in the RWD, minimum six-inch diameter borings were drilled to at least ten feet below ground surface. The wells were designed to consist of 3-inch or 4-inch diameter solid casing to one foot below surface, and then perforated casing to the bottom of the well. The filter pack was supposed to be pea gravel or coarse sand, and approximately 12 inches of cement-based grout was to be used for the annular seal. It has not been documented whether the wells were installed as per the typical construction design submitted or whether they meet standard monitoring well design and construction standards. Therefore, they may not provide reliable groundwater quality data. The Discharger is required to evaluate whether the existing wells will provide adequate groundwater monitoring data, and if not, install properly constructed wells.

Groundwater Degradation

38. State Water Resources Control Board (SWRCB) Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation Policy") requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives).
39. The Regional Board finds that the Discharger has not demonstrated that it is to the maximum benefit to the people of the State of California to degrade groundwater, and therefore groundwater degradation is not allowed under this Order.
40. This wastewater treatment facility provides treatment and control of the discharge that includes advanced treatment, disinfection, disposal to the leachfield using a pressure dose system, disposal by spray irrigation to an area of native vegetation, and evaporation, evapotranspiration and percolation as disposal methods.

41. A standard septic tank and leachfield system provides minimal treatment of wastewater and is highly dependent upon proper management and waste constituent attenuation in the disposal field to prevent pollution of groundwater and to protect beneficial uses. While the Basin Plan conditionally allows septic tanks with leachfield systems for rural areas, it includes the expectation of optimal site selection and conservative design that meet the minimum guidelines, and attentive and judicious operation and maintenance. The leachfield area that is part of this wastewater system fails to meet Basin Plan criteria for depth of soil below leachline trenches. Therefore, this Order requires the Discharger to provide a certified wastewater plant operator to ensure adequate operation and maintenance of the facility. It also requires advanced treatment, including a disinfection system to prevent pollution, nuisance, or contamination. Finally, the Order prescribes conservative effluent limits and an effluent and groundwater monitoring program to ensure that the discharge complies with State Board Resolution No. 68-16.

Basin Plan, Beneficial Uses, and Regulatory Considerations

42. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Resources Control Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
43. Surface water drainage is to Woodleaf Creek. Woodleaf Creek is tributary to the Middle Fork Feather River between Little Last Chance Creek and Lake Oroville.
44. The beneficial uses of the Middle Fork Feather River from Little Last Chance Creek to Lake Oroville are municipal and domestic supply; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; spawning, reproduction, and/or early development; and wildlife habitat.
45. The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
46. The State Water Resources Control Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. Except for the spray disposal area, the wastewater facility, including the leachfield, will not be exposed to stormwater runoff. This Order prohibits the application of effluent to the spray disposal field during precipitation events and within 24 hours before and after precipitation events. Therefore, the exposure of wastewater to stormwater runoff is precluded. Because there will be no exposure of wastewater from this facility to storm water runoff, the Discharger is not required to obtain coverage under General Permit No. CAS000001.

47. On 13 September 1999, in accordance with the California Environmental Quality Act (CEQA; CCR, Title 14, Section 15261 et. seq.), the Yuba County Community Development Department certified a negative declaration for the Young Life Woodleaf camp expansion project.
48. The project, as approved by the Yuba County Community Development Department, may degrade water quality, possibly to the degree that water quality objectives will be violated, beneficial uses impacted, and pollution, contamination, or nuisance created. However, Discharge Specification B.8, Effluent Limitation C, Groundwater Limitation E, and Provisions F.1a, F.1.b, F.1.c, F.2, F.4, and F.6, among others, mitigate or avoid pollution, nuisance, contamination, exceedance of water quality objectives, and impacts on beneficial uses.
49. Section 13267(b) of California Water Code provides that: *“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”*

The technical reports required by this Order and the attached “Monitoring and Reporting Program No. R5-2004-0040” are necessary to assure compliance with these waste discharge requirements. The Discharger owns and operates facilities that discharge waste subject to this Order.

50. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells, as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to CWC Section 13801, apply to all monitoring wells.
51. State regulations that prescribe procedures for detecting and characterizing the impact of waste constituents from waste management units on groundwater are found in Title 27. While the wastewater treatment facility is exempt from Title 27, the data analysis methods of Title 27 may be appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order.
52. The discharge authorized herein and the treatment and storage facilities associated with the discharge, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, California Code of Regulations (CCR), Section 20005 et seq. (hereafter Title 27). The exemption, pursuant to Title 27 CCR Section 20090(a), is based on the following:

- a. The waste consists primarily of domestic sewage and treated effluent;
- b. The waste discharge requirements are consistent with water quality objectives; and
- c. The treatment and storage facilities described herein are associated with a domestic wastewater treatment facility.

53. Pursuant to California Water Code Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Public Notice

54. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

55. The Discharger and interested agencies and persons were notified of the intent to prescribe waste discharge requirements for this discharge, and provided an opportunity to submit written views and recommendations and to be heard in a public meeting.

56. In a public meeting, all comments pertaining to the discharge were heard and considered.

IT IS HEREBY ORDERED that pursuant to Sections 13263 and 13267 of the California Water Code, Order No. 5-00-063 is rescinded, and Young Life, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited.
3. Discharge of sewage or partially treated wastewater from a sanitary sewer system at any point upstream of the chlorine baffle system outlet, including tanks, is prohibited.
4. Discharge of treated wastewater to the old leachfield after **30 June 2004** is prohibited.
5. Surfacing of wastewater within or downgradient of the leachfield is prohibited.
6. Runoff of wastewater or tailwater beyond the limits of the spray disposal area is prohibited.

7. Discharge of waste classified as 'hazardous' under Section 2521, Chapter 15 of Title 23 or 'designated', as defined in Section 13173 of California Water Code is prohibited.

B. Discharge Specifications

1. The monthly average flow to the new leachfield shall not exceed 13,000 gpd.
2. The monthly average flow to the spray disposal area shall not exceed 18,000 gpd, during the months of March through November.
3. The wastewater treatment and disposal areas shall not cause pollution or a nuisance as defined by Section 13050 of the California Water Code.
4. Objectionable odor originating at the wastewater facility shall not be perceivable beyond the limits of the facility.
5. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.
6. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
7. Application of wastewater shall be confined to the new leachfield and spray disposal area as defined in this Order.
8. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge. In particular, the Discharger shall comply with the following items and shall describe their implementation in the Operation and Maintenance Plan required by the Provisions. The frequency of each task may be modified upon written request by the Discharger and written approval by the Executive Officer. The written request must clearly show that the reduction in frequency will not have a potential to impact water quality.
 - a. Inspect all storage, pumping, and filtering tanks at least annually
 - b. Properly maintain the tanks when any one of the following conditions exist, or can be reasonably projected to occur before the next inspection.
 1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment;
 2. The scum layer is within three inches of the outlet device; or,

3. The sludge layer is within eight inches of the outlet device.
- c. Promptly repair or replace tanks that are cracked or otherwise damaged
- d. Clean tank filters on a regular basis
9. The WWTF shall have sufficient treatment, storage, and disposal capacity to accommodate allowable wastewater flow and design seasonal precipitation during the winter months. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
10. Public contact with wastewater and the disposal areas shall be precluded or controlled through such means as fences and signs, or acceptable alternatives.

C. Spray Disposal Area Specifications

1. The Discharger shall operate the spray disposal system and equipment to optimize the quality of the discharge. In particular, the Discharger shall comply with the following items and shall describe their implementation in the Operation and Maintenance Plan required by the Provisions. The frequency of each task may be modified upon written request by the Discharger and written approval by the Executive Officer. The written request must clearly show that the reduction in frequency will not have a potential to impact water quality.
 - a. Control vegetation in the spray disposal area to prevent root obstruction of spray heads, uneven distribution of effluent, and damage or disruption of the proper functioning of the runoff-control flume;
 - b. Evaluate whether effluent is evenly distributed over the entire spray disposal area and to prevent possible runoff of applied wastewater from the spray disposal area
 - c. Maintain the spray disposal systems distribution piping and spray heads annually.
2. Wastewater applied to the spray disposal area shall be managed to minimize both erosion and runoff within the disposal area.
3. Spray disposal runoff shall be completely contained within the designated disposal area and shall not enter any surface water drainage course.
4. Direct and windblown spray from the spray disposal area shall be confined to the designated spray disposal area and prevented from contacting public use areas.
5. The Discharger may not apply wastewater to the spray disposal area at the following times:
 - a. During the months of December, January, and February;

- b. Within 24 hours of a forecasted storm, during a storm event, or within 24 hours after precipitation events;
 - c. When the soil is saturated or snow-covered;
 - e. When standing water is present in the spray disposal area, including immediately above the runoff-control berm at the bottom of the area;
 - f. When wind velocities exceed 30 mph.
6. The wetted area produced during spray disposal shall comply with the following setback requirements:
- a. 100 feet from any spring, domestic well or irrigation well;
 - b. 50 feet from any watercourse;
 - c. 50 feet from all property boundaries.
 - d. 50 feet from any public road

D. Leachfield Specifications

1. The Discharger shall operate the leachfield system and equipment to maximize treatment of wastewater and optimize the quality of the discharge. In particular, the Discharger shall comply with the following items and shall describe their implementation in the Operation and Maintenance Plan required by the Provisions. The frequency of each task may be modified upon written request by the Discharger and written approval by the Executive Officer. The written request must clearly show that the reduction in frequency will not have a potential to impact water quality.
- a. Control vegetation in the leachfield to prevent root intrusion and damage
 - b. Monthly evaluate whether effluent is evenly distributed to all the leachlines
 - c. Clean and maintain the leachfield's distribution piping annually.
2. The leachfield shall comply with the following setback requirements:
- a. 100 feet from any spring, domestic well or irrigation well;
 - b. 50 feet from any seasonal watercourse;
 - c. 50 feet from all property boundaries.

- d. 50 feet from any public road

E. Effluent Limitations

1. Effluent discharged from the chlorine baffle system outlet shall not have a pH less than 6.5 or greater than 8.4.
2. Effluent discharged from the chlorine baffle system shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ¹	mg/L	20	30
Suspended Solids	mg/l	20	30
Total Nitrogen	mg/l	30	50
Total Coliform Organisms	MPN/100ml	23	240

¹BOD denotes 5-day biochemical oxygen demand at 20° C

F. General Solids Disposal Specifications

Sludge means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the facility.

1. Sludge and solid waste shall be removed from screens, SBR basins, and tanks as needed to ensure optimal plant operation.
2. Treatment and storage of sludge shall be confined to the treatment facility property, and shall be conducted in a manner that precludes infiltration of waste constituents into soils in a mass or at concentrations that will violate the Groundwater Limitations of this Order.
Sludge and solid waste shall be removed from screens, SBR basins, and tanks as needed to ensure optimal plant operation.
3. Treatment and storage of sludge shall be confined to the treatment facility property, and shall be conducted in a manner that precludes infiltration of waste constituents into soils in a mass or at concentrations that will violate the Groundwater Limitations of this Order.
4. Any storage of residual sludge or solid waste at the facility shall be temporary, and the waste shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or at concentrations that will violate the Groundwater Limitations of this Order.
5. Residual sludge and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at

disposal sites operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification.

G. Groundwater Limitations

The discharge, in combination with other site-derived sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality.

H. Provisions

1. All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code and shall be prepared by a registered professional as described by Provision H.3.
 - a. **At least 30 days prior to commencing operation of the modified wastewater facility but no later than 30 June 2004**, the Discharger shall submit a report certifying that the WWTF has been constructed in accordance with this Order. The report at a minimum shall provide the following:
 - i. A detailed description of the duplex pumping system, in-line media filtration system, and chlorine metering and baffle system, along with as-built drawings and any other figures or illustrations necessary to provide a detailed description of the treatment system modifications;
 - ii. A description of the type and location of the flow meters and sampling ports that have been installed to meet compliance with the Monitoring and Reporting Program;
 - iii. A detailed description of the spray disposal system. The description shall include the type and location of sprinklers, piping, and flow control valves. The construction details regarding the runoff-control flume, and as-built drawings and any other figures or illustrations necessary to provide a detailed description of the spray disposal system and flume shall be included;
 - iv. A detailed description of the fences and signs, or acceptable alternatives that have been installed to meet compliance with Discharge Specification B.10;
 - v. Documentation that a certified wastewater treatment plant operator has been retained to manage the operation and maintenance of the facility. The documentation shall include a copy of the contract between the Discharger and operator, and a description of the duties and responsibilities of the operator.
 - b. **At least 30 days prior to commencing operation of the modified wastewater facility but no later than 30 July 2004**, the Discharger shall submit and implement

an Operation and Maintenance (O&M) Plan for the wastewater facility. The O&M Plan shall instruct field personnel how to manage the day-to-day treatment and discharge operations to comply with the terms and conditions of this Order and how to make field adjustments, as necessary, to preclude violation of this Order. It shall also include a troubleshooting flowchart and a description of notification requirements. A copy of the O&M Plan shall be kept at the facility for reference by operating personnel. Key personnel shall be familiar with its contents. The O&M Plan shall include the following elements:

- i. A description of how vegetation will be controlled and maintained in the leachfield to prevent root intrusion and damage, and in the spray disposal area to prevent uneven distribution of effluent and damage or disruption of the proper functioning of the runoff-control flume;
- ii. A description of the procedures for routine inspecting and testing of essential elements of the wastewater facility, including, but not limited to the SBR, tanks, basins, grease separator, holding tank, pumping systems, filtration systems, the chlorine metering and baffle system, the leachfield, and the spray disposal area. The purpose of the procedures shall be to ascertain the condition of the facility, to provide early detection of potential problems that may be developing, to determine if collected grease/scum/sludge need to be removed, to evaluate whether effluent is evenly distributed to all the leachlines and over the entire spray disposal area, and to prevent possible runoff of applied wastewater from the spray disposal area.
- iii. A description of maintenance procedures for essential elements of the wastewater facility, including, but not limited to the SBR, tanks, basins, grease separator, holding tank, pumping systems, filtration systems, the chlorine metering and baffle system, the leachfield, and the spray disposal area. The purpose of the procedures shall be to ensure proper functioning of the wastewater facility and to prevent potential violation of this Order. The timely removal and disposal of accumulated grease/scum/sludge should be included. Sludge and solid waste removed from grease traps, tanks, and treatment system should be pumped and hauled only by a licensed septage hauler. Tanks or basins that are cracked or otherwise damaged should be promptly repaired or replaced. Tank and treatment system filters should be cleaned on a routine basis.
- iv. A description of procedures to be implemented to prevent the potential for sewer overflows and minimize the potential impact of overflows should they occur. This should include the identification of those elements of the facility that are potential sources of overflows and a description of procedures that will be implemented in order to prevent overflows from those areas. It should also outline steps to be taken when an overflow or spill occurs, and provide a framework to ensure that all overflows and spills are properly identified, responded to, and reported. Staff training regarding spill prevention, response, and reporting procedures should be included.

- c. By **30 August 2004**, the Discharger shall submit a *Monitoring Well Evaluation Report*. This report shall contain an evaluation of whether the existing network of groundwater monitoring wells have been (a) placed in appropriate locations and (b) constructed in a standard manner such that they may be used in a quarterly groundwater monitoring program. If the wells have not been constructed in such a manner that they will provide representative groundwater samples, or if they were not placed in the locations necessary to demonstrate whether the leachfield is, or has the potential to, degrade the first encountered groundwater, then they must be replaced. The *Monitoring Well Evaluation Report* shall clearly show the construction details of each well and shall contain the results of at least one sampling event (conducted per the "Groundwater Monitoring" section of MRP No. R5-2004-0040). The Evaluation Report shall also contain a groundwater Sampling and Analysis Plan (SAP) that contains the information listed in the second section of Attachment C.
- d. If the *Monitoring Well Evaluation Report* contains the recommendation, or if the Executive Officer's review of the report determines, that the existing network of groundwater monitoring wells is not sufficient to accurately monitoring groundwater, then by **30 November 2004**, the Discharger shall submit a *Groundwater Monitoring Well Workplan* for the installation of additional wells. The workplan shall describe the installation of a sufficient amount of groundwater monitoring wells to allow evaluation of the groundwater quality upgradient, beneath, and downgradient of the site. Every monitoring well shall be constructed to yield representative samples from the uppermost layer of the uppermost water bearing zone and to comply with applicable well standards. The workplan shall be consistent with, and include the items listed in, the first and second sections of Attachment C, "*Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results.*" If necessary, the workplan shall also describe the abandonment of any unusable wells.
- e. If a *Groundwater Monitoring Well Workplan* is submitted as per the requirements in Provision F.1.d, then by **15 May 2005**, the Discharger shall submit a *Groundwater Monitoring Well Installation* report. The report shall be consistent with, and include the items listed in, the third section of Attachment C.
- f. By **1 July 2006**, the Discharger shall submit a *Groundwater Quality Study Report*. For each groundwater monitoring parameter/constituent identified in the Monitoring and Reporting Program, the report shall present a summary of monitoring data, a calculation of the concentration in background monitoring well(s), and a comparison of background groundwater quality to that in wells used to monitor the facility. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), and shall be based on data from at least four consecutive quarterly (or more frequent) groundwater monitoring events.
- g. If groundwater monitoring data indicate that groundwater degradation has occurred as a result of effluent discharge at the facility, then within **120 days** of the Executive Officer's request, the Discharger shall submit a technical report which shall include a

comprehensive evaluation of treatment and control measures that address full mitigation of the source of exceedance(s). The report shall describe treatment and control alternatives studied, the alternative(s) recommended for implementation, and any specific methods the Discharger proposes to monitor and assure continuous optimal performance, the source of funding, and proposed schedule for implementation. The recommended improvements and implementation schedule are subject to the Executive Officer's approval, but the schedule for full implementation shall be as short as practicable and not exceed two years unless specifically approved by the Regional Board.

2. The operation and maintenance of the wastewater facility shall be managed by a certified wastewater treatment plant operator.
3. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
4. The Discharger shall comply with the Monitoring and Reporting Program No. R5-2004-0040, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
5. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
6. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to assure compliance with terms of this Order.
7. Upon the reduction, loss, or failure of the sanitary sewer system resulting in a sanitary sewer overflow, the Discharger shall take any necessary remedial action to (a) control or limit the volume of sewage discharged, (b) terminate the sewage discharge as rapidly as possible, and (c) recover as much as possible of the sewage discharged (including wash down water) for proper disposal. The Discharger shall implement all applicable remedial actions including, but not limited to, the following:
 - a. Interception and rerouting of sewage flows around the sewage line failure;
 - b. Vacuum truck recovery of sanitary sewer overflows and wash down water;

- c. Use of portable aerators where complete recovery of the sanitary sewer overflows are not practicable and where severe oxygen depletion is expected in surface waters; and
 - d. Cleanup of sewage-related debris at the overflow site.
8. The Discharger shall report to the Regional Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
 9. The Discharger shall not allow waste-free wastewater to be discharged into the wastewater collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Waste-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of wastes.
 10. The Discharger shall submit to the Regional Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharge shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board in writing when it returns to compliance with the time schedule.
 11. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
 12. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or recession of this Order.
 13. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
 14. The Regional Board will review this Order periodically and will revise requirements when necessary.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 19 March 2004.

THOMAS R. PINKOS, Executive Officer

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2004-0040
YOUNG LIFE
YOUNG LIFE WOODLEAF WASTEWATER SYSTEM
YUBA COUNTY

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JRM: 3/19/04

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0040

FOR

YOUNG LIFE
YOUNG LIFE WOODLEAF WASTEWATER SYSTEM
YUBA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring tanks, influent, effluent, the leachfield, the spray disposal field, and groundwater. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Regional Board staff shall approve specific sample station locations prior to implementation of sampling activities.

All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to test pH) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to each monitoring event;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

TANK MONITORING

The Discharger shall monitor grease traps, holding tanks, and SBR basins and report this information as described below.

<u>Parameter</u>	<u>Units</u>	<u>Type of Measurement</u>	<u>Minimum Inspection</u>	<u>Reporting Frequency</u>
Sludge depth and scum thickness in each compartment of each grease trap, holding tank, and SBR basin	Feet	Staff Gauge	Annually	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually

Grease traps, holding tanks, and SBR basins shall be pumped when any one of the following conditions

exist or may occur before the next inspection:

- a. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment; or,
- b. The scum layer is within three inches of the outlet device; or,
- c. The sludge layer is within eight inches of the outlet device.

INFLUENT MONITORING

Wastewater influent shall be monitored prior to discharge to the SBR. Influent monitoring shall include, at a minimum, the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow	gpd	Metered	Continuous	Monthly
Total Suspended Solids	mg/l	Grab	Weekly	Monthly
BOD ₅ ¹	mg/l	Grab	Weekly	Monthly

¹ BOD₅ denotes five-day, 20° Celsius Biochemical Oxygen Demand.

EFFLUENT MONITORING

Wastewater effluent shall be monitored after it has passed through the chlorine baffle system outlet, but prior to discharge to the disposal areas. Grab samples are considered adequately composited to represent the wastewater. Effluent monitoring shall include, at a minimum, the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Suspended Solids	mg/l	Grab	Weekly	Monthly
BOD ₅ ¹	mg/l	Grab	Weekly	Monthly
Total Coliform Organisms ²	MPN/100 ml	Grab	Weekly	Monthly
Total Kjeldahl Nitrogen	mg/l	Grab	Monthly	Monthly
Nitrates as Nitrogen	mg/l	Grab	Monthly	Monthly
Total Dissolved Solids	mg/l	Grab	Monthly	Monthly
PH	Std. units	Grab	Monthly	Monthly
Standard Minerals ³	mg/l	Grab	Annually	Annually

¹ BOD₅ denotes five-day, 20° Celsius Biochemical Oxygen Demand.

² Using a minimum of 15 tubes or three dilutions.

³ Standard Minerals shall include, at a minimum, the following elements and compounds: Barium, Boron, Calcium, Iron, Magnesium, Manganese, Sodium, Potassium, Chloride, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

LEACHFIELD MONITORING

The Discharger shall conduct a visual inspection of the leachfield on a weekly basis and the results shall be included in the monthly monitoring report. Evidence of surfacing wastewater, erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. If surfacing water is found, then a sample shall be collected and tested for pH, total coliform organisms, and total dissolved solids. In addition to the visual inspections, monitoring of the leachfield shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow to Leachfield	gpd	Metered	Continuous	Monthly
Average Application Rate	gpd	Calculated	Monthly	Monthly
Leachline Observation Riser Inspection ¹	Inches	Measurement	Monthly	Monthly

¹ The Discharger shall measure the depth of any wastewater in each observation port riser. If wastewater is detected, then the Discharger shall provide the depth of each disposal trench and the corresponding depth of soil remaining between the mounded wastewater and ground surface.

SPRAY DISPOSAL FIELD MONITORING

During times when effluent is being applied to the spray disposal field, the Discharger shall conduct a visual inspection of the spray disposal field on a daily basis and the results shall be included in the monthly monitoring report. Evidence of wastewater ponding, field saturation, runoff, erosion, or the presence of nuisance conditions shall be noted in the report. In addition to the visual inspections, monitoring of the spray disposal field shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Freeboard in Flume ¹	inches	Measurement	Daily ²	Monthly
Flow to Sprayfield	gpd	Metered	Continuous	Monthly
Average Application Rate	gpd	Calculated	Monthly	Monthly

¹ The Discharger shall measure and report the shortest distance between the water surface of any standing wastewater in the flume and the top of the flume, i.e., the location where discharge from the flume would first occur.

² During the months of March through November

GROUNDWATER MONITORING

If the well evaluation report required by Provision H.1.c shows that the existing wells are adequate to monitor groundwater quality, then groundwater monitoring is to begin with the third quarter of 2004. If the existing wells need to be replaced with new groundwater monitoring wells, then the groundwater monitoring shall begin starting with the second quarter 2005.

Prior to sampling, groundwater elevations shall be measured and the wells shall be purged at least three well volumes until pH and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated and used to determine

groundwater gradient and direction of flow. Samples shall be collected using approved EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency</u>
Depth to Groundwater	0.01 Feet	Measurement	Quarterly
Groundwater Elevation ¹	0.01 feet above msl ²	Calculated	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly
PH	S.U.	Grab	Quarterly
Total Dissolved Solids	mg/l	Grab	Quarterly
Nitrates as Nitrogen	mg/l	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/l	Grab	Quarterly
Total Coliform Organisms ³	MPN/100 ml	Grab	Quarterly

¹ Groundwater elevation shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

² msl = mean sea level

³ Using a minimum of 15 tubes or three dilutions

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, leachfield, groundwater etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of influent, effluent, leachfield, and spray field monitoring;
2. If the expanded treatment and disposal system has not yet been constructed, then the monthly report shall state so, and shall provide the anticipated date of construction;

3. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
4. If requested by staff, copies of laboratory analytical report(s); and
5. A calibration log verifying calibration of all hand held monitoring instruments and the chlorine residual meter used to comply with the prescribed monitoring program.

B. Quarterly Report

The Discharger shall establish a quarterly sampling schedule for effluent monitoring such that samples are obtained approximately every three months. If the existing wells are adequate to monitor groundwater quality, groundwater monitoring shall begin the third quarter of 2004. If the existing wells need to be replaced with new groundwater monitoring wells, then the groundwater monitoring shall begin starting with the second quarter 2005. Quarterly monitoring reports shall be submitted to the Board by the **1st day of the second month after the quarter** (i.e. the January-March quarterly report is due by May 1st) and may be combined with the monthly report. The Quarterly Report shall include the following:

1. Results of groundwater monitoring. The results of regular monthly monitoring reports for March, June, September and December may be incorporated into their corresponding quarterly monitoring report;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of the monitoring data to background groundwater quality and an explanation of any violation of Groundwater Limitations;
6. Summary data tables of historical and current water table elevations and analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum; and

8. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

An Annual Report shall be prepared as the fourth quarter monitoring report. The Annual Report will include all monitoring data required in the monthly/quarterly schedule. The Annual Report shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of the regular groundwater monitoring report for the last quarter of the year;
2. If requested by staff, tabular and graphical summaries of all data collected during the year;
3. Results of the effluent annual monitoring;
4. A description of any activity to control vegetation in the disposal areas;
5. The results of the inspection, and, if necessary, the maintenance activities performed on the wastewater facility;
6. A summary of the annual grease trap, tank, and SBR basin inspections and of the volumes septage and sludge removed from the wastewater facility, and the identification of the corresponding disposal site.
7. A statement of when the O&M Manual was last reviewed for adequacy, and a description of any changes made during the year;
8. A description of the annual evaluation of effluent distribution and adjustments made, if any;
9. A summary of any maintenance and repair activities which were performed on the wastewater collection system;
10. Attached documents verifying certification of operator managing the wastewater facility;
11. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

19 March 2004
(Date)

JRM: 3/19/04

INFORMATION SHEET

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2004-0040
YOUNG LIFE
YOUNG LIFE WOODLEAF WASTEWATER SYSTEM
YUBA COUNTY

The Young Life Woodleaf Camp is four miles north of the community of Challenge in Yuba County. The camp is situated on a 209-acre parcel and contains cabins, a cafeteria, a laundry facility, a swimming pool, and a maintenance shop. The camp season generally lasts from March through November, with a peak season from May through September. Peak-season population is about 400 people per day with a wastewater flow of approximately 19,000 gpd. The camp population during the months of October, November, March and April is approximately 260 people per day and the camp is closed during the months of December, January, and February, with only a skeleton crew on site.

The Discharger has proposed significant expansion and modification of the camp and the existing wastewater facility. Because Waste Discharge Requirements (WDRs) Order No. 5-00-063 does not reflect existing site conditions or the proposed expansion and modifications, this Order revises that Order.

All domestic wastewater at this facility is transferred from the source areas via a collection system to the treatment facility. Wastewater from the cafeteria first passes through a grease separator. The existing treatment facility consists of a sequencing batch reactor (SBR) with a design capacity of 40,000 gpd, and a 15,000-gallon holding tank with a suspended chlorine tablet feeder. The modified wastewater treatment system will consist of the existing grease separator, trash tanks/debris racks, SBR, and holding tank, along with a new float-controlled duplex pumping system, an in-line filtration system, and a chlorine metering and baffle system. The existing effluent disposal system consists of a leachfield, with 1,000 feet of leachlines. The new disposal system will consist of a spray disposal field and a pressure-dosed leachfield, with 4,000 feet of leachlines. The old leachfield will no longer be utilized. The new leachfield will be utilized throughout the entire year, while the spray disposal area will only be used from March through November. The maximum permitted flow to the two systems is 31,000 gpd.

The soil conditions in the new leachfield are inconsistent and portions of the trenches have been excavated directly in fractured bedrock. This may result in less treatment of effluent than is normally provided by more homogenous, fine-grained soil, and less restrictive pathways to groundwater. For that reason, this Order prescribes certain precautions that must be taken to protect groundwater. These include the construction of a curtain drain to divert runoff and subsurface drainage around the area, the regular monitoring of observation ports in the leachline trenches, a groundwater monitoring program, conservative effluent limits, and management of the wastewater facility by a certified wastewater treatment plant operator.

The WDRs specify effluent limits for BOD, suspended solids, total Kjeldahl nitrogen and coliform. The WDRs also require the submittal a report certifying that the wastewater facility has been constructed in accordance with this Order, submittal and implementation of an *Operation and Maintenance Plan*, and several plans and reports to provide for an adequate monitoring and evaluation of groundwater quality in the vicinity of the leachfield.